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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,795	02/18/2004	Keiichi Tanaka	1248-0694P	9620
2292 7590 03/13/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER DUDA, KATHLEEN	
			ART UNIT 1756	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
2 MONTHS		03/13/2007	ELECTRONIC	

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/779,795
Filing Date: February 18, 2004
Appellant(s): TANAKA ET AL.

Charles Gorenstein
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 21, 2006, appealing from the Office action mailed February 2, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is substantially correct. Claims 4-7 are allowed.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The rejection of claims 3-5 under 35 U.S.C. 102(b) as being anticipated by Matsuyama et al. and claims 6, 7 and 10 under 35 U.S.C. 102(e) as being anticipated by Kiguchi et al.

Claims 4-7 are allowed.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2003/0210361	KIGUCHI et al.	11-2003
2001/0007733	MATSUYAMA et al.	7-2001
6,864,034	NISHIDA et al.	3-2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuyama et al. (US 2001/0007733).

A color filter is manufactured. On the main surface of substrate SUB2 the pattern of the black matrix (BM) is formed, corresponding to the first

film. As can be seen in Figure 11(a) the first film is tapered and therefore includes a gap width regulating section by which the width of the gap region is narrowed. A photosensitive resin is coated and exposed through the substrate to UV radiation using the first film as a mask. This formed dyed substrate layer DP whose height is lower than the height of the BM. INK®, INK(G), INK(B) is supplied to the ink reservoirs POD by an ink jet method, corresponding to the second film material. Ink is raised on the dyed substrate layer making use of the surface tension of the ink. This is realized by using BM as partition walls and making the height of the DP lower. The ink is diffused into the dyed substrate layers DP by a suitable heat treatment. See specifically [0159]-[0169] and Figures 11(a)-12(d).

Claims 1-3, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiguchi et al. (US 2003/0210361).

A color filter is manufactured. Transparent substrate 2 is formed. A chromium film is formed and patterned using a photoresist exposed UV rays and etching to form shading layer (black matrix 3). Photosensitive resin film is deposited and exposed to form blanks 14 which extend outward and cover the inside of shading layer 3. Ink as a coloring material is jetted and applied to the color filter layer formation regions (pixel portions 13) from an ink jet head. Ink droplets are applied, dried and heated to form pixel portions 13 of R, G and B. See specifically [0032]-[0043] and Figure 4.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama et al. as applied to claim 1 above and further in view of Nishida et al. (US Patent 6,864,034).

Matsuyama et al. teach forming the pattern of the black matrix (first film) using a black resin but is silent on using thermal imaging processing a laser beam. Nishida et al. Teach in the background of the invention that thermal imaging processes which used laser beams have been used for forming separation ribs for color filter and black matrices of liquid crystal display devices (column 1, lines 46-51). It would have been obvious to one of ordinary skill in the art to have used thermal imaging with a laser beam to form the black matrix in the method of Matsuyama et al. because Nishida et al. teach invention that thermal imaging processes which used laser beams have been used for forming separation ribs for color filter and black matrices of liquid crystal devices.

(10) Response to Argument

1. In regards to the art rejection of claim 1 over Matsuyama et al., Appellant argues that Matsuyama et al. do not teach "the gap width regulating section, by which a width of the gap region is narrowed in the one direction". Appellant argues that the examiner is "interpreting the claim language to read on Matsuyama depicted in Fig. 11A as the gap narrows from the top of the gap to the bottom of the gap" and that this is not the

direction recited in claim 1. Claim 1 recites that the sections extend generally "along one direction" and that the ink jet traverses along "the one direction". There is not a limitation that the narrowing must occur in the direction Appellant argues. The claim recites "one direction". Figure 11(a) of Matsuyama shows that the substrate (SUB2) has partitions (BM) along one direction (the figure being a cross-section) and that the gap (considered the areas between the BMs) is narrowed in one direction which is top to bottom. The second film is then the ink jet material which will flow perpendicular to the paper relative to Figure 11(a) before being cured to form the second film material.

2. In regards to the art rejection of claims 2, 8 and 9 (the rejection of claims 3-7 has been withdrawn) over Matsuyama et al., Appellant argues that none of the elements are taught by Matsuyama et al. and have not been explained by the Examiner. The Examiner has removed claims 3-7 from the rejection.

Claim 2 recites that the partition section extends into the gap region. As shown in Figure 11(a) since the BMs are tapered, they extend into the gap region.

Claim 8 recites using a photosensitive material which is taught in paragraph 0060, for example, of Matsuyama et al.

Claim 9 recites that the substrate is transparent and that the light is irradiated through the substrate. This is taught in paragraph 0062, for example.

3. In regards to the art rejection of claim 1 over Kiguchi et al., Appellant argues that Kiguchi et al. do not teach "the gap width regulating section, by which a width of the gap region is narrowed in the one direction". Figure 4(a) depicts the substrate 2 with partitions and gaps 13. The gap is wider at the top (furthest away from the substrate) than at the bottom where the protrusion 3 is present. Claim 1 recites that the sections extend generally "along one direction" and that the ink jet traverses along "the one direction". There is not a limitation that the narrowing must occur in the direction Appellant argues. The claim recites "one direction". The ink is then formed between the partitions.

4. In regards to the art rejection of claims 2, 3, 8 and 9 (the rejection of claims 6, 7 and 10 has been withdrawn) over Koguchi et al., Appellant argues that none of the elements are taught by Koguchi et al. and have not been explained by the Examiner. The Examiner has removed claims 6 and 7 from the rejection.

Claim 2 recites that the partition section extends into the gap region. As shown in Figure 4(a), the partitions (portion 3) extend into the gap region.

Claim 3 recites that a part of the partition section is separate. Figure 4(a) depicts the partition being comprised of 3 and 14.

Claim 8 recites using a photosensitive material which is taught in paragraphs 0038 and 0039, for example, of Kiguchi et al.

Claim 9 recites that the substrate is transparent and that the light is irradiated through the substrate. This is taught in paragraphs 0037 and 0044, for example.

5. In regards to the art rejection of claim 10 over Matsuyama et al. in view of Nishida et al., Appellant argues that claim 10 depends on claim 1 and that Nishida et al. does not make up for deficiencies of Matsuyama et al. The Examiner has discussed the rejection of claim 1 over Matsuyama et al. above and it is the combination of the references which is being used to reject dependent claim 10.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 1756

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

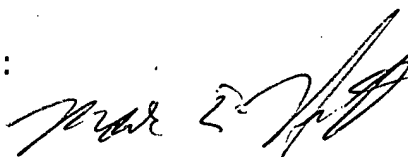
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